TABLE 10. COMPARISON OF NEEDED 1991 PROCUREMENT FUNDING USING THREE DIFFERENT PROJECTION METHODS a/
(In billions of fiscal year 1987 dollars)

Procurement Appropriation Accounts	Method Used b/		
	Varying Share	Constant Share	Constant Amount
Aircraft	3.2	3.2	3.2
Missiles	3.7	3.4	3.4
Weapons and Tracked Combat Vehicles	1.7	1.7	1.7
Other			
Tactical and Support Vehicles	1.7	1.6	1.6
Communications and Electronics	6.6	5.5	5.2
Other Support Equipment	3.1	2.5	2.3
Subtotal, Other	11.4	9.6	9.1
Total	20.0	17.9	17.4

SOURCE: Congressional Budget Office, based on documents submitted in support of the President's fiscal year 1987 budget.

a. Excludes ammunition account.
b. Method used to project the funding of unspecified portion of the procurement budget beyond 1988.

weapons of all sizes, from the M16 rifle to the large caliber howitzers. The Army buys over 140 different types of ammunition, primarily for two purposes: training and stockpiling for war reserves. The Army has publicly stated its funding needs in both of these areas, and these requirements were used to adjust the funding in the ammunition account.

The annual expenditure required for training ammunition was estimated by the Army to be about $1.7 billion in fiscal year 1987. 14/ The

14. Testimony of Maj. Gen. Donald S. Pihl before the Subcommittee on Preparedness, Senate Armed Services Committee, 98:2 (March 1984).

TABLE 11. ADJUSTMENTS REQUIRED TO BRING PROCUREMENT IN LINE WITH DEPLOYMENT GOALS, FISCAL YEARS 1988-1991 a/
(Changes to planned Army funding in millions of fiscal year 1987 dollars)

Procurement Appropriation Accounts	1988	1989	1990	1991
Aircraft	-29	+714	-105	0
Missiles	+168	+168	+564	+564
Weapons and Tracked Combat Vehicles	-795	-795	+1,258	+810
Other				
Tactical and Support Vehicles	0	0	0	0
Communications and Electronics	+752	+410	+350	+450
Other Support Equipment	0	+70	+70	+70
Subtotal Other	+752	+480	+420	+520
Total	+96	+567	+2,137	+1,894

SOURCE: Congressional Budget Office, based on data contained in a letter from Lt. Gen. Carl E. Vuono, Deputy Chief of Staff for Operations and Plans, to Mr. Robert Hale, CBO, February 1986.

a. Excludes ammunition account.

Army also has a stated goal to increase its filled war reserve stocks (WRS) of munitions from 65 percent of its ultimate objective in 1986 to 80 percent by 1991. The Army planned to spend a total of $2.8 billion on ammunition for its WRS in 1986 and 1987 combined. This expenditure would have increased the amount of its filled objective from 65 percent to 72 percent. If it is assumed that each percentage increase in WRS filled is related to a constant expenditure of ammunition funds, the desired 15 percentage point increase in filling the WRS objective between 1986 and 1991 would require $6.0 billion over this period. 15/ Since $2.6 billion was appropriated in 1986

15. This is obviously a simplistic method for determining the cost of ammunition to fill the Army's reserve stocks. An optimum method would estimate the cost of each type of munition to be bought in the appropriate quantities. The CBO does not have access to data on the specific types and quantities of ammunition needed, however, and so adopted a method often used by the Army in public discussions of this topic.

and 1987, funding for the remaining $3.4 billion would be required from 1988 through 1991.

The combined funding needed to meet Army goals for ammunition for training and war reserve stocks is summarized in Table 12. The table also includes the Army's planned spending on ammunition as reported in press accounts and contained in its internal budget document. Obviously, the programmed level of funding fails to meet the Army's stated needs for both training and the goal of 80 percent of WRS filled by 1991.

Research, Development, Testing, and Evaluation, Military Construction, and Family Housing

The three remaining large Army appropriations--RDT&E, MILCON, and family housing--made up 10.3 percent of the total Army budget in 1987. RDT&E is by far the largest of the three, typically accounting for almost 6.5 percent of the total Army budget.

The Army's funding goal for its research and exploratory development accounts would provide for 5 percent annual real growth. These two accounts, however, encompass less than 20 percent of the total RDT&E budget; advanced development and engineering development--for which the Army has not provided a stated goal--claims the majority of RDT&E funds. Therefore, a 5 percent increase in the two smaller accounts would yield only a 1 percent overall increase in the RDT&E budget, if all other RDT&E accounts were funded at a constant level. Thus, the expressed Army goal for RDT&E might understate the likely funding needs for the entire account. Similarly, the goals for military construction and family housing did not permit direct estimates of total funding needed through 1991.

Therefore, CBO assumed that a constant share of the overall Army budget, equal to 6.5 percent, was allotted to RDT&E in each of the years from 1988 through 1991. A similar approach was used to project the funding in the Army's military construction and family housing accounts, allotting 2.1 percent and 1.9 percent of the total budget, respectively, to these two activities. This assumption reflects recent history, since these accounts have enjoyed roughly constant shares of the Army budget in recent years (see Table 13). 16/

16. As with the procurement accounts, an alternative method would hold funding for RDT&E, MILCON, and family housing constant at fiscal year 1987 levels through 1991. The impact of using this method, rather than the one outlined above, on overall Army budget needs through 1991, will be discussed in the next section.

TABLE 12. AMMUNITION FUNDING REQUIREMENTS, FISCAL YEARS 1986-1991
(In billions of fiscal year 1987 dollars)

	Appropriated a/		Projected			
	1986	1987	1988	1989	1990	1991
Projected to Meet Goals	2.5	2.1	3.0	3.2	3.6	2.9
Programmed	2.5	2.1	2.4	2.2	2.1	2.2

SOURCE: Congressional Budget Office, based on Army goals data, press accounts, and Department of the Army, Program Objectives Memorandum (February 1986).

a. Ammunition funds already appropriated by Congress.

THE COST OF MEETING THE ARMY'S GOALS

Using the methods described earlier in this chapter, CBO projected the funding levels that the Army would need over the period from 1987 through 1991 to meet all its goals. 17/ At a minimum, these projections suggest that the Army's budget for the six appropriations included in CBO's analysis would have to grow from $74.2 billion in 1987 to a level of $93.0 billion by 1991, suggesting a need for rates of annual average real growth of 5.8 percent (see the "all goals met" section of Table 14). This level assumes that needs for operation and maintenance funds are best determined by the Army factors method. If, on the other hand, O&M requirements are best predicted by holding constant the relationship between O&M and the capital stock, as roughly has been the case in the last 10 years, then using the RFV method would predict that the budget would have to grow to a level of $96.0 billion by 1991, yielding an average annual rate of real growth of 6.6 percent through 1991. 18/

17. Although most projections of future budgets include five years of growth, the Army supplied CBO with goals through 1991 only. Since the Army budget for fiscal year 1987 has already been appropriated, this paper will discuss only those budgets which the Congress has yet to consider--those for 1988 through 1991.

18. If all the portions of the budget projected on the basis of a budget share--unspecified portions of procurement, RDT&E, MILCON, and family housing--were held constant at fiscal year 1987 levels, the resultant fiscal year 1991 budget would range from $88.1 billion to $90.8 billion, with annual real growth rates of 4.3 percent to 5.1 percent.

The budgets associated with achieving all the Army's goals would also tend to maintain the current balance between operating and investment funds. Operating and support funds--defined here as those for operation and maintenance, personnel, and family housing--decreased from 73 percent of the Army budget in 1980 to 66 percent in 1986. (O&S funding in 1987 accounted for 70 percent of the Army's budget.) Under the budgets needed to achieve Army goals, these funds would account for about 65 percent of the total budget for 1988 through 1991.

Estimates of the cost of meeting goals in 1987 also suggest how much fiscal restraints have affected the Army's ability to meet its goals. In 1987, CBO estimates that the Army would have needed $80.1 billion to meet its goals. The Army requested $81.5 billion, but the Congress actually appropriated only $74.2 billion.

MODIFYING ARMY GOALS

History and recent policy statements suggest that certain of these Army goals are particularly likely to be modified. The effects of two such modifications are examined here. Chapter III explores broader changes in the Army goals that would be needed to hold down increases in spending.

Historically, the Army has not achieved the increases in ammunition called for in its goals. Those advocating increases in stocks of ammunition point out that they would be critical in the event of war; weapons without

TABLE 13. PERCENT OF THE ARMY BUDGET APPORTIONED TO RDT&E, MILCON, AND FAMILY HOUSING, FISCAL YEARS 1981-1987

	1981	1982	1983	1984	1985	1986	1987	Average
RDT&E	7.2	6.9	6.7	6.1	5.9	6.4	6.1	6.5
MILCON	2.3	2.1	1.8	1.9	2.3	2.4	2.0	2.1
Family Housing	a/	a/	1.8	1.8	1.8	1.9	2.2	1.9

SOURCE: Congressional Budget Office, based on historical budget data.

a. Family housing for all services was paid out of a single Defense Department appropriation before 1983.

ammunition would not be useful. On the other hand, given the seemingly low probability of a major war, one could argue that the Army should spend scarce resources buying the weapons, which generally take longer to produce, and should build up ammunition stocks only if a conflict seemed more imminent. It must be kept in mind, however, that as long as two years could be needed even to begin to accumulate significant quantities of some munitions.

If the Army does not build up its stocks, but rather stays at today's levels, costs to meet the Army's goals would fall by $3.0 billion over the period from 1988 through 1991. The range of needed annual real growth for meeting the other goals would be 5.2 percent to 6.0 percent a year from now through 1991, depending on needs for O&M, rather than the range of 5.8 percent to 6.6 percent noted above in meeting all Army goals (see Table 14).

While a decision not to build up ammunition stocks could hold down cost growth, a decision to keep open production lines for weapons could

TABLE 14. COSTS ASSOCIATED WITH MEETING THE ARMY'S GOALS
(In billions of fiscal year 1987 dollars)

Goals Met	O&M Estimation Method	Appropriated a/ 1986	Appropriated a/ 1987	Projected 1988	Projected 1989	Projected 1990	Projected 1991
All	RFV	74.7	74.2	85.5	90.4	94.6	96.0
	Army Factors	74.7	74.2	85.7	89.8	92.6	93.0
No Ammo. Increase	RFV	74.7	74.2	85.3	89.7	92.3	93.9
	Army Factors	74.7	74.2	85.6	89.2	90.3	90.8
All and Extend Production Lines	RFV	74.7	74.2	85.5	90.4	95.4	98.4
	Army Factors	74.7	74.2	85.7	89.8	93.4	95.4

SOURCE: Congressional Budget Office.

NOTES: O&M = operation and maintenance;
RFV = Ratio-to-Force value estimation.

a. Funds actually appropriated by the Congress.

increase needed costs. The Congress has expressed concern over the Army's plans to complete purchases of the M1 tank, the Bradley Fighting Vehicle, and the Apache helicopter within the next few years. 19/ Without continuing U.S. Army purchases, it is probable that production lines for these weapons would shut down, leaving a void in U.S. production capability and causing a long delay should more of these weapons be needed in time of war. Thus, national security concerns could dictate maintaining active tank, fighting vehicle, and attack helicopter production lines. Indeed, Congressional committees have requested studies of the cost and desirability of maintaining these production lines. 20/

Maintaining production lines of such expensive items, even at the level the Army believes is the minimum economic level of production, would entail considerable cost. The CBO estimates that the cost, in fiscal year 1987 dollars, of maintaining the lines at annual production rates of 600 M1 tanks, 540 Bradley Fighting Vehicles and 72 Apache helicopters through 1991 would be $0.7 billion in 1989, $2.2 billion in 1990, and $3.0 billion in 1991. These costs are additional to the procurement plans contained in the President's budget for 1987. Aligning the procurement programs with the Army's fielding goals, however, extended the Apache production line to 1989, the M1 line to 1990, and the Bradley line through 1991. Thus, costs in addition to those already attributed to meeting the Army's goals would be $0.7 billion in 1990 and $2.2 billion in 1991. The requirement to keep these three lines open through 1991 would push up the average annual real growth needed through 1991 to meet Army goals to a range of 6.5 percent to 7.3 percent, again depending on needs for O&M (see Table 14).

In sum, the cost of meeting Army goals would depend partly on how much would have to be spent for operation and maintenance and also on certain key goals that could easily change. Nonetheless, the range always suggests that the Army would require five years of annual real growth of at least 4 percent to meet its goals and could require annual increases averaging 6 percent. Since the Army budget did not grow at all, in real terms, between 1986 and 1987, annual real increases of 5 percent to 7 percent would be required to meet the Army's goals by 1991.

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19. The Army currently plans to terminate the M1 line in 1989, the Bradley line in 1990, and the Apache line in 1988.

20. *National Defense Authorization Act for Fiscal Year 1987*, Report No. 99-331, Senate Armed Services Committee, 99:2 (1986); *Department of Defense Appropriations Bill, 1987*, Report No. 99-793, House Appropriations Committee, 99:2 (1986); and *National Defense Authorization Act for Fiscal Year 1987*, Report No. 99-718, House Armed Services Committee, 99:2 (1986).

CHAPTER III

THE IMPACT OF ZERO BUDGET GROWTH ON THE ARMY'S ABILITY TO MEET ITS GOALS

The CBO projects that the Army would need 4 percent to 6 percent annual real growth in its budget from fiscal years 1986 through 1991 in order to meet most or all of its goals (see Chapter II). Since the Congress did not provide any real growth in the Army's 1987 budget, attaining the Army's goals by 1991 would require about 6 percent annual real growth in the Army budget between 1987 and 1991. From 1980 through 1985, the Army's budget grew at even higher rates, with average annual real growth approaching 10 percent. But that growth has stalled in recent years as the Congress has reduced the defense budget. Indeed, in 1986 and 1987, annual real reductions in the Army's budget averaged 3 percent. This chapter examines the possible effects of no budget growth over the next five years on the Army's ability to meet its goals.

Illustrating the effects of zero real growth does not suggest that this level of growth is the most likely outcome for the next five years, or that it is the appropriate level of growth. The appropriate level, whether zero or a higher or lower number, depends on national security needs and fiscal concerns that go beyond the scope of this report. Actual changes in the Army's budget over the next five years will reflect a detailed budget debate, the outcome of which cannot be forecast. Army Undersecretary James R. Ambrose, however, recently indicated that he feels that the Army's future holds budgets of "zero or less than zero" growth and is, thus, encouraging the Army to consider ways of altering its plans to accommodate leaner fiscal times. 1/

In the absence of real budget growth, the Army would be forced to choose among its goals, as it obviously would not be able to afford them all. The rest of this chapter examines three approaches that the Army might take to allocate limited funds in the event that it receives a constant level of funding for the next five years. The three approaches emphasize different portions of the Army's budget:

- Option I gives priority to operating and support (O&S) funds (military personnel--MILPER--operation and maintenance, and family housing);

1. *Washington Post*, November 19, 1986, p. 1.

- Option II emphasizes investment accounts (procurement, research, development, testing, and evaluation--RDT&E--and military construction--MILCON);

- Option III attempts to place balanced emphasis on funding for both investment and operating and support accounts.

All the analysis in this chapter is in real terms and costs are expressed in fiscal year 1987 dollars that adjust for the effects of inflation. For this reason, this chapter ignores a favorite way of reducing defense budgets in recent years--financing changes, which include use of past overestimates of inflation to fund current needs (spending the so-called inflation dividend) and reductions in estimates of future inflation. The CBO cannot estimate how much, if any, of the inflation dividend remains to be spent on future needs. Nonetheless, given the large amounts of the dividend that has already been used and the inflation rates of 2 percent to 3 percent now being assumed in future budgets, it seems unlikely that these financing changes would be sufficient to avoid most of the real reductions discussed in this chapter.

OPTION I--EMPHASIZE OPERATING AND SUPPORT FUNDING

Many expressed concern during the late 1970s and early 1980s that the Army had become ineffective because of several deficiencies: insufficient training, lack of spare parts and facilities needed to maintain and operate equipment already deployed, and a deteriorating physical plant. One well-known critic, General E. C. (Shy) Meyer, coined the phrase "hollow Army" to describe his view of these conditions in 1980. Since then, many feel that increased spending for operating expenses has resulted in an Army that is ready and able to fight effectively. In its latest annual report, the Army states that it has improved its readiness significantly since 1980 by improving the quality of its soldiers, increasing the amount and realism of their training, increasing war reserve stocks, and reducing maintenance and repair backlogs. As a consequence, the Army feels that the high priority it placed on building a ready and capable Army has been justified. 2/ Furthermore, the Army still considers that maintaining, and even improving, its current state of readiness should be its first priority when allocating resources.

2. John A. Wickham, Jr., and the Honorable John O. Marsh, Jr., *The Posture of the United States Army for Fiscal Year 1987* (Department of the Army, February 1986).

Recent Congressional actions reflect the same priorities. The largest reductions made to the President's request for the Army's 1987 budget were realized in the investment accounts. Indeed, while the Army's military personnel and O&M appropriations received 3 percent and 7 percent real growth, respectively, over 1986 levels, the procurement and RDT&E accounts were reduced 14 percent and 4 percent, respectively, in real terms.

This approach would minimize the chances of returning to a hollow Army in the late 1980s and early 1990s by providing ample funds for the Army's operating accounts which support personnel and day-to-day maintenance and operations. Specifically, it would fund the Army's goal to increase reserve personnel, including the number of full-time reservists. The Army has stated that, by creating new, more combat-intensive divisions, it has shifted many support missions to the reserves and, therefore, needs more reserve personnel. Under this approach the Army reserve forces could continue to grow and provide additional support to the active Army's 18 divisions. As a result, personnel funding would rise from $28.0 billion in 1987 to $30.3 billion in 1991.

Furthermore, operation and maintenance funds that pay for day-to-day operations would be allocated using the ratio-to-force-value (RFV) method discussed in Chapter II, which provides the higher level of funding. 3/ This approach should furnish support at levels consistent with policies of recent years, which have held O&M roughly constant as a fraction of capital stock. 4/

Finally, the family housing account would maintain its constant share of the budget (and current relationship with the number of active personnel, since that also would remain constant), thereby providing the Army with funds to continue its 1987 level of maintenance and improvements to its stock of houses. These assumptions mean that total operating and support funds would increase markedly over the next five years, from $52.1 billion in 1987 to $60.3 billion in 1991 (see Table 15).

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3. This same approach, using the alternate Army factors method for projecting future O&M costs, would result in essentially the same outcome. Appendix B includes additional details on the sensitivity of results to projection methods.

4. The level of procurement spending possible within the constraints of a zero growth, five-year budget with full O&S funding would be significantly below that currently programmed by the Army or dictated by the Army's modernization goals. As a consequence, the total value of the Army's accumulated equipment would not grow quite as rapidly as it would have with an unconstrained budget. Therefore, O&M costs, which are based on approximately 15 percent of the total force value, would also be somewhat less than those predicted during a period of significant budget growth (see Chapter II).

On the other hand, the remaining, or investment, portion of the Army budget would be cut enough under this approach so that the total budget would experience no real growth. This would mean that investment would fall from $22.1 billion in 1987 to only $13.9 billion by 1991, a reduction of 37 percent below 1987 levels and almost 60 percent below the level needed to achieve the Army's goals.

What would such drastic reductions in investment mean to the Army? To illustrate the possible effects, this study assumes that each investment account is cut proportionately and that the procurement reductions are

TABLE 15. FUNDING FOR VARIOUS ACCOUNTS WITH ZERO GROWTH IN THE ARMY BUDGET AND EMPHASIS ON OPERATING AND SUPPORT, FISCAL YEARS 1986-1991
(In billions of fiscal year 1987 dollars)

Account	Appropriated a/ 1986	1987	Projected 1988	1989	1990	1991
Operating and Support (O&S)						
Personnel	27.2	28.0	29.4	29.8	30.1	30.3
O&M	21.1	22.5	25.7	26.8	27.6	28.4
Family Housing	1.4	1.6	1.6	1.6	1.6	1.6
Subtotal, O&S	49.7	52.1	56.7	58.2	59.3	60.3
Investment						
Procurement	18.6	16.0	12.7	11.6	10.8	10.1
RDT&E	4.8	4.6	3.6	3.3	3.1	2.9
MILCON	1.6	1.5	1.2	1.1	1.0	0.9
Subtotal, Investment	25.0	22.1	17.5	16.0	14.9	13.9
Total	74.7	74.2	74.2	74.2	74.2	74.2

SOURCES: Congressional Budget Office, based on data from Office of the Assistant Secretary of Defense (Comptroller), *National Defense Budget Estimates for Fiscal Year 1987* (May 1986); and *Making Continuing Appropriations for Fiscal Year 1987*, Conference Report, 99-1005, 99:2 (1986).

NOTE: Numbers may not add to totals because of rounding.

a. These funds have already been appropriated by the Congress.

spread proportionately over each procurement program. This approach ignores obvious choices that the Army might make when distributing scarce procurement funds among its many programs. The Army might choose to fund preferentially those noncombat systems that it feels are necessary to support the many weapons it purchased earlier in the decade. It is impossible, however, for CBO to make knowledgeable decisions concerning which items are necessary for the Army to fight effectively. All programs, therefore, received equal priority when limited procurement funds were allocated. The study also ignores unit cost increases that would occur as procurement funds are cut and fewer tanks or aircraft or other weapons are bought at each production plant. 5/ Under these assumptions, CBO estimated the number of Army units that would be equipped with major new weapons when all new weapons purchased through 1991 had been delivered (see Table 16).

For major ongoing programs, the drastic cut in procurement funds would not have effects nearly as marked as the drop in funds. By 1991, for example, the M1 tank would be fielded to 77 tank units under this approach, compared with the Army's goal of 89 units. The Bradley Fighting Vehicle (BFV) would equip 76 units compared with 102 units under the Army's goals. These relatively modest changes would occur because some programs, like the M1 tank and Bradley Fighting Vehicle, are well under way--indeed would be completed over the next few years--and so would not be greatly affected by the cutbacks.

Other, newer programs, however, would be severely affected. The SINGCARS radio, the mobile subscriber equipment (MSE) communications system, and the M9 ACE combat bulldozer are examples. This result emphasizes the long-run aspect of this approach; it would be felt most heavily in the 1990s when new systems not purchased over the next five years would otherwise play an important role in improving Army capability. The long-run effects of this approach are reinforced by the sharp cutback in research funds under this option. The Army would not only procure fewer of its newest weapons, but by 1991 it would have 40 percent fewer dollars to develop the weapons to maintain or improve its forces in the 1990s and beyond.

Another effect of greatly reduced spending for investment would be lack of funds for ammunition. Low levels of ammunition funding could prevent the Army from adding further to its munitions war reserve stocks.

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5. The effect of reduced production rates and resultant unit cost increases, though small, would be to retard even more the Army's progress toward meeting its goals.

Indeed, very low levels of funding for ammunition could force the Army to remove ammunition from its war reserve stocks for training, thus causing it to fall even further from its ultimate WRS objective.

This approach would also produce what some might view as an unbalanced Army budget. By 1991, operating and support funds would consume fully 81 percent of the Army's budget under this approach, compared with 70 percent in 1987 and an average level of 69 percent over the past 10 years.

TABLE 16. IMPACT OF OPTION I ON THE ARMY'S GOALS AS OF FISCAL YEAR 1991 a/

	Goal	Option I
Force Structure (Personnel at Year End)		
Active	781,000	781,000
Reserve	812,100	812,100
Modernization (Number of Units Equipped)		
M1 battalions	89	77
BFV battalions and cavalry squadrons	102	76
AH-64 battalions	34	31
UH-60 companies	54	49
MLRS batteries	47	39
Patriot batteries	93	68
M9-ACE battalions	25	13
SINCGARS division sets	15	7
MSE corps sets	5	3
RPV batteries	10	5
Readiness Funding (Percent Annual Growth in O&M, 1987 through 1991)	5.4-7.9	6.0
Sustainability-- Munitions in War Reserve Stock (Percent of Objective Met)	80	67

SOURCE: Congressional Budget Office, based on data contained in a letter from Lt. Gen. Carl E. Vuono, Deputy Chief of Staff for Operations and Plans to Mr. Robert Hale, CBO, February 1986.

a. Based on funded delivery period, not actual inventory in 1991.

If history is a guide, such a large percentage of funds devoted to operations might not leave enough funds to invest in new hardware required to maintain Army capability. On the other hand, it might be the kind of budget that the Army would need to support all of the equipment that it purchased during the 1980 through 1986 period.

OPTION II--EMPHASIZE INVESTMENT

The mission that most influences the need for so large an Army, and hence so large a budget, is a major war in Europe against the Warsaw Pact. This approach, which emphasizes future investment at the expense of operating funds and personnel, might be consistent with the seemingly small chance of such a war in the next few years, and might suggest that the Army should build for the future. On the other hand, even those wishing to emphasize investment would not ignore the need for continuing adequate operations. A cadre of soldiers must be trained in peacetime to ensure that they can operate the Army's weapons and to provide the basis for expansion of forces in event of war.

Thus, this option, even with its emphasis on investment, would not simply provide all of the investment dollars needed to achieve the Army's goals and absorb, in the operating appropriations, all the cuts necessary to maintain a constant total budget. Instead, the O&M account that provides for day-to-day training and maintenance would continue to receive some of the increases in funding needed to operate new equipment. All other accounts would be reduced proportionately and sufficiently to ensure that the total budget would not grow.

Specifically, the O&M account would receive the annual real growth of 3.8 percent that is suggested by the Army factors method described in Chapter II. 6/ This growth rate, however, could not maintain the historical relationship between O&M and the Army capital stock. Thus, this approach poses a greater risk than Option I that the Army would have to cut back on maintenance or day-to-day training. Nonetheless, O&M would receive substantial real growth and O&S funding would continue to account for 68 percent to 70 percent of the total Army budget. Furthermore, throughout the period from 1988 through 1991, O&S would be funded at a level significantly higher than during the five years from 1975 through 1980, when about $40 billion in 1987 dollars was appropriated annually for O&S.

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6. The impact of using the alternate method to project O&M funding, the RFV method, on the Army's zero growth budget is discussed in Appendix B.

While training and operations would be maintained at a relatively high level, this approach would reduce the Army's peacetime personnel by 7 percent below 1987 levels. The Army could adapt to such cuts in various ways: by emphasizing cuts in the reserves rather than the active forces, by cutting more officers than enlisted personnel, by cutting back on real pay levels with resultant reductions in quality, or by reducing nonpay costs within the personnel account such as those for travel. Indeed, since the active portion of the Army has not grown since 1980, the Army might wish to make greater reductions in reserve personnel than active. Again, CBO is not in a position that enables it to make such choices and, therefore, chose to illustrate one possible approach by assuming that the 7 percent reduction is applied equally to all personnel areas, with the cuts in pay and allowances being achieved by reducing numbers of soldiers rather than real levels of pay. As a result, active-duty strengths in the Army would fall to 728,000 by 1991; reserve strengths would fall to about 732,100--about 15 percent below the planned 1991 level of 812,100 that would be achieved if the Army goals were met (see Table 17).

These personnel reductions would probably thwart the Army's plan to maintain 28 active and reserve divisions. The Army might, for example, have to return to its 1985 force of 25 divisions (16 active and 9 reserve) and also reduce troops assigned outside the divisions in combat and support roles. In terms of wartime capability, this approach would mean fewer active-duty troops that could be brought to bear quickly in a war and fewer reserves to back them up. Thus, in wartime the Army would have to depend more heavily on drafting civilians and training them as soldiers, which takes months. In peacetime, this approach could require some reduction in overseas commitments; or, alternatively, the smaller number of active-duty soldiers would have to spend more time overseas.

Compared with Option I, fewer soldiers would have more and newer equipment. Under this approach, the investment accounts would also decrease about 7 percent below their 1987 level, but would be 40 percent below the levels that CBO estimated would be needed to achieve the Army's goals. This decrease means that, relative to Army goals, fewer units would be equipped with the newest equipment (see Table 18). For example, 81 units would be equipped with M1 tanks, compared with the 89 units that the Army hoped to equip with M1s by 1991.

On the other hand, this option would not have the drastic effects on some newer systems that would occur under Option I with its very large cuts in investment. For example, 9 divisions would be equipped with the new

SINCGARS radio by 1991, compared with the seven divisions possible under the first approach and the Army's goal of 15 divisions equipped by 1991.

This approach would also allow some improvements in the stocks of weapons, spare parts, and ammunition that allow the Army to sustain combat in a prolonged war. These stocks would grow from the 1987 level of about 69 percent of objectives filled to about 72 percent by 1991. This compares with 80 percent of objectives achieved by 1991 under the Army's goals, and a regression to 67 percent under the first option.

TABLE 17. FUNDING FOR VARIOUS ACCOUNTS WITH ZERO GROWTH IN THE ARMY BUDGET AND EMPHASIS ON INVESTMENT, FISCAL YEARS 1986-1991
(In billions of fiscal year 1987 dollars)

Account	Appropriated a/ 1986	1987	Projected 1988	1989	1990	1991
Operating and Support (O&S)						
Personnel	27.2	28.0	26.6	26.4	26.2	26.1
O&M	21.1	22.5	25.1	25.5	25.7	26.1
Family Housing	1.4	1.6	1.5	1.5	1.5	1.5
Subtotal, O&S	49.7	52.1	53.2	53.4	53.5	53.6
Investment						
Procurement	18.6	16.0	15.2	15.1	15.0	14.9
RDT&E	4.8	4.6	4.4	4.3	4.3	4.3
MILCON	1.6	1.5	1.4	1.4	1.4	1.4
Subtotal, Investment	25.0	22.1	21.0	20.8	20.7	20.6
Total	74.7	74.2	74.2	74.2	74.2	74.2

SOURCES: Congressional Budget Office, based on data from Office of the Assistant Secretary of Defense (Comptroller), *National Defense Budget Estimates for Fiscal Year 1987* (May 1986); and *Making Continuing Appropriations for Fiscal Year 1987*, Conference Report, 99-1005, 99:2 (1986).

NOTE: Numbers may not add to totals because of rounding.

a. These funds have already been appropriated by the Congress.

Finally, this alternative might produce a more balanced Army budget than did Option I. Under this alternative, operating and support costs would constitute 72 percent of the Army budget by 1991, which would be slightly more than the 1987 level and come close to the historical average. By contrast, operating and support costs would consume 81 percent under the first approach.

TABLE 18. IMPACT OF OPTIONS I AND II ON THE ARMY'S GOALS AS OF FISCAL YEAR 1991 a/

	Goal	Option I	Option II
Force Structure (Personnel at Year End)			
Active	781,000	781,000	728,000
Reserve	812,100	812,100	732,100
Modernization (Number of Units Equipped)			
M1 battalions	89	77	80
BFV battalions and cavalry squadrons	102	76	81
AH-64 battalions	34	31	32
UH-60 companies	54	49	50
MLRS batteries	47	39	41
Patriot batteries	93	68	73
M9-ACE battalions	25	13	17
SINCGARS division sets	15	7	9
MSE corps sets	5	3	4
RPV batteries	10	5	7
Readiness Funding (Percent Annual Growth in O&M, 1987 through 1991)	5.4-7.9	6.0	3.8
Sustainability-- Munitions in War Reserve Stocks (Percent of Objective Met)	80	67	72

SOURCE: Congressional Budget Office, based on data contained in a letter from Lt. Gen. Carl E. Vuono, Deputy Chief of Staff for Operations and Plans to Mr. Robert Hale, CBO, February 1986.

a. Based on funded delivery period, not actual inventories in 1991.